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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/255,605	02/22/1999	SHUNPEI YAMAZAKI	SEL-125	8794

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EXAMINER
KOVALICK, VINCENT E

ART UNIT	PAPER NUMBER
2673	

DATE MAILED: 07/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/255,605	YAMAZAKI ET AL.	
	Examiner	Art Unit	
	Vincent E Kovalick	2673	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 May 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Response to Amendment

1. This Office Action is in response to Applicant's Amendment D dated May 5, 2003 in response to PTO Office Action dated November 27, 2002. Applicant's amendments to claims 1, 7, 13, and 22-26 have been noted and entered in the record.

Applicant's Remarks

2. Applicant's remarks are rendered moot in view of the amendments to claims 1, 7, 13 and 22-26.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1, 7, 13, and 19-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schoolman (U.S. Patent No. 5,281,957 taken with Catallo et al. (U.S. Patent No. 5,867,817) in view of Spitzer (U. S. Patent No. 6,349,001) taken with Fan (U.S. Patent No. 6,452,572). Relative to claims 1, 7, 13 and 22-26 Schoolman **teaches** a portable computer and head mounted display (col. 2, lines 63-68; col. 3, lines 1-33 and Figs. 1 and 7). Schoolman further **teaches** an information processing device comprising: a display device having flat panel displays for right

and left eyes mounted on the head of a user (col. 3, lines 1-4 and Fig. 7); further still, Schoolman **teaches** a controller connected to said display device, wherein information is transmitted from said controller to at least one of said flat panel displays to display said information (col. 5, lines 6-13; col. 6, lines 50-67 and Fig. 10).

Schoolmen **does not teach** an input operation device connected to said controller; and a camera, wherein said controller transmits a signal in the form of an electric wave to said display device and wherein said flat panel displays are capable of displaying a plurality of pieces of information at a time, and wherein said display device, said controller, said input operation device and said camera are adapted to be used by the same user, and wherein an image information is transmitted from a TV tuner to said at least one of said flat panel displays to display said image information; or a pick-up device which converts as least images of and input operation device and a hand of a user into electrical singles and supplies said electrical signals to said controller.

Catallo et al. **teaches** a speech recognition manager (col. 2, lines 15-67). Catallo et al. further **teaches** a controller connected to said display device (col. 3, lines 55-67 and col. 4, lines 1-8); an input operation device connected to said controller (col. 6, lines 36-54); and wherein said controller transmits a signal in the form of an electric wave to said display device and wherein said flat panel displays are capable of displaying a plurality of pieces of information at a time (col. 3, lines 53-67 and col. 4, lines 1-8). It being understood that it is well known and in common practice in the art to display a plurality of pieces of information at a time on LCD's.

Schoolman teaches a head mounted display device incorporating flat panel displays for both eyes, wherein information is transmitted from a controller to at least one of the said flat panel displays. Catallo et al. teaches a head mounted system wherein an input operation device is connected to a controller wherein said controller transmits signals to said display devices. It would have been obvious to a person of ordinary skill in the art at the time of the invention that the display devices would require the means to facilitate transmitting the signal from a video source and formatting said signal for display on the said head mounted flat panel displays.

Schoolman taken with Catallo et al. **does not teach** a camera; or wherein said display device, said controller, said input operation device and said camera are adapted to be used by the same user, and wherein an image information is transmitted from a TV tuner to said at least one of said flat panel displays to display said image information; or a pick-up device which converts as least images of and input operation device and a hand of a user into electrical singles and supplies said electrical signals to said controller.

Spitzer **teaches** an eyeglass interface system (col. 1, lines 56-67; col. 2, lines 1-67; col. 3, lines 1-21 and Fig. 1). Spitzer further **teaches** a camera mounted in a head mounted device (col. 4, lines 12-15 and Fig. 1, and wherein said display device, said controller, said input operation device and said camera are adapted to be used by the same user (col. 2, lines 59-65 and col. 4, lines 21-23); still further , Spitzer **teaches** an image pick-up device (col. 4, lines 12-15 and Fig. 1) which converts as least images of and input operation device and a hand of a user into electrical singles and supplies said electrical signals to a display controller (col. 2, lines 59-65).

Further, it would have been obvious to a person of ordinary skill in the art at the time of the invention that the camera (pick-up device) in the system as taught by Spitzer could be oriented such that the field of view would take in a user input device, and whatever is in the field of view of the camera, including the hand of the user, would be included in the image that is transmitted to a display device.

In addition it is well understood in the art and in common practice, in active matrix flat panel display devices, for each pixels to have an associated thin film transistor (TFT) and for TFT's to be incorporated in pixel driving circuits and to have these associated logic elements implemented on the same substrate.

Schoolman taken with Catallo et al. teaches a head mounted display system incorporating flat panel displays for both eyes, with an input operation device connected to a controller for transmitting video signals to said flat panel display devices. Spitzer teaches a head mounted display device wherein the input device is a camera with the system including the means to transmit a camera image to said head mounted displays. It would have been obvious to a person of ordinary skill in the art at the time of the invention that the display devices as taught by Schoolmen taken with Catallo et al. would require a video source to generate the image for display on the said head mounted display and that the attachment of a camera to the system as taught by Schoolman taken with Catallo et al. would be a video input means necessary for capturing an image for display on the said head mounted displays.

Schoolman taken with Catallo et al. in view of Spitzer **does not teach** said information processing device wherein an image information is transmitted from a TV tune to said at least one of said flat panel displays to display said image information.

Fan et al. **teaches** a monocular head-mounted display system col. 1, lines 49-67; col. 2, lines 1-67 and col. 3, lines 1-40); Fan et al further **teaches** said information processing device wherein an image information is transmitted from a TV tuner to said at least one of said flat panel displays to display said image information (col. 25, lines 24-33 and Fig. 60).

Schoolman taken with Catallo et al. in view of Spitzer teaches a head mounted video display device incorporating a camera as a video signal source, with the controller means necessary for capturing and transmitting a video signal from the camera to the head mounted display device/s.

Fan et al. teaches a head mounted display system integrated with a television tuner.

It would have been obvious to a person of ordinary skill in the art at the time of the invention that the incorporation of the means to facilitate displaying TV images would add significant capability to the utility of the said head mounted device in that the display devices could be adapted to display both computer and/or TV generated images.

Regarding claims 19 and 21, it would have been obvious to a person of ordinary skill in the art at the time of the invention to provide a camera/image pickup device apart from the display device if it was a desired feature of the system.

Relative to claim 20, it is well understood and in common practice in the art to drive flat panel display devices with source side driving circuits.

5. Claims 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schoolman taken with Catallo et al. in view of Spitzer taken with Fan et al. as applied to claim 1 in item 4 hereinabove, and further in view of Funai et al. (U. S. Patent No. 6,162,667).

Regarding claim 2, Schoolman taken with Catallo et al. in view of Spitzer taken with Fan et al. **does not teach** channel formation regions of TFTs connected to pixel electrodes of the said flat panel displays of said display device are constituted by a semiconductor thin film formed by a collection of a plurality of bar-shaped or planar bar-shaped crystals formed on an insulting surface.

Funai et al. **teaches** a method for fabricating thin film transistors (col. 3, lines 40-67; col. 4 lines 1-67; col. 4, lines 1-67; col. 6, lines 1-67; col. 7, lines 1-67 and col. 8, lines 1-43); Funai et al. further **teaches** channel formation regions of TFTs connected to pixel electrodes of the said flat panel displays of said display device are constituted by a semiconductor thin film formed by a collection of a plurality of bar-shaped or planar bar-shaped crystals formed on an insulting surface (col. 4, lines 58-64 and col. 5, lines 40-56).

Schoolman taken with Catallo et al. in view of Spitzer taken with Fan teaches a head mounted video display device incorporating means to display images generated from either a system controller or a TV tuner. Funai et al. teaches a method of fabricating semiconductor device wherein a catalyst element is selectively introduced into a predetermined region of an amorphous semiconductor film, thereby selectively crystallizing the predetermined region of the amorphous semiconductor film, wherein crystal growth proceeds in a direction substantially parallel to a

surface of the substrate in a predetermined region of the amorphous semiconductor film, thereby forming a lateral crystal growth region. It would have been obvious to a person of ordinary skill in the art at the time of the invention to use semiconductor devices fabricated using the method as taught by Funai et al in order to use semiconductors with faster response characteristics.
Regarding claim 4, Funai et al. further **teaches** an information processing device wherein the crystal lattices at grain boundaries of a channel formation regions have continuity (col. 12, lines 60-65). Though Funai et al. does not specifically cite 90 % of the crystal lattices at grain boundaries of the channel formation regions having continuity, by the selective crystallization of a predetermined region and with the crystal growth in the direction of the predetermined region forming a defined crystal growth region the resulting crystal lattices would have a high degree of interconnection.

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schoolman taken with Catallo et al. in view of Spitzer. taken with Fan et al. in view of Funai et al. as applied to claim 2 in item 5 hereinabove and further in view of Oka et al. (U. S. Patent No. 6,235,563).
Relative to claim 3, Schoolman taken with Catallo et al. in view of Spitzer taken with Fan et al. in view of Funai et al. **does not teach** an information processing device wherein the channel formation regions of TFT's comprise a crystal grain having a <110> plane orientation.
Oka et al. **teaches** an information processing device wherein the channel formation regions of TFT's comprise a crystal grain having a <110> plane orientation (col. 4, lines 64-67; col. 5, line 1 and col. 11 lines 34-40).

Schoolman taken with Catallo et al. in view of Spitzer taken with Fan and further in view of Funai et al. teaches a head mounted video display device incorporating means to display images generated from either a system controller or a TV tuner, wherein said display devices are structured with semiconductors fabricated to produce fast response times. Oka teaches a method of formulating a film wherein crystalline seeds are easily generated by the employment of a relatively high temperature plasma process, polycrystalline silicon with large grains with uniform direction of orientation, such as <110>. It would have been obvious to a person of ordinary skill in the art at the time of the invention to utilize semiconductor devices manufactured as taught by Oka in that it yields semiconductors with improved field effect mobility.

7. Claim 5 is rejected under 35 U. S. C. 103 (a) as being unpatentable over Schoolman taken with Catallo et al. in view of Spitzer taken with Fan et al. as applied to claim 1 in items 4 herein above, and further in view of Intriligator (U.S. Patent No. 6,163,323) taken with Lewis (U.S. Patent No. 6,040,812).

Relative to claim 5, Schoolman taken with Catallo et al. in view of Spitzer taken with Fan et al. **does not teach** flat panel displays comprising a display device on which one screen is written at frequencies in the range from 30 Hz to 180 Hz and on which screen display is carried out with the polarity of the voltage applied to the pixel electrodes inverted for each screen.

Intriligator **teaches** a self-synchronizing animation (col. 1, lines 6-9 and col. 2, lines 27-40). Intriligator further teaches a display device on which one screen is written at frequencies in the range from 30 Hz to 180 Hz (col. 3, lines 24-37).

Schoolman taken with Catallo et al. in view of Spitzer taken with Fan et al. in view of Intriligator **does not teach** flat panel displays comprising a display device on which screen display is carried out with the polarity of the voltage applied to the pixel electrodes inverted for each screen.

Lewis **teaches** an active matrix display with integrated drive circuitry (col. 1, lines 6-8 and 54-65; col. 2, lines 1- 16). Lewis further **teaches** display device on which screen display is carried out with the polarity of the voltage applied to the pixel electrodes inverted for each screen (col. 13, lines 23-34).

Schoolman taken with Catallo et al. in view of Spitzer taken with Fan teaches a head mounted video display device incorporating means to display images generated from either a system controller or a TV tuner. Intriligator teaches a display refresh rate of 60 Hz. It would have been obvious to a person of ordinary skill in the art at the time of the invention to utilize a 60 Hz refresh rate in that it would be consistent with the 60 Hz refresh rate that is in common use in art. Louis teaches said display is carried out with the polarity of the voltage applied to the pixel electrodes inverted for each screen. It would have been further obvious to a person of ordinary skill in the art at the time of the invention to use the polarity inversion method in order to reduce system noise and minimize EMI.

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schoolman taken with Catallo et al. in view of Spitzer taken with Fan et al. as applied to claims 1 in item 4 herein above, and further in view of Nishi et al. (U.S. Patent No. 5,541,747).

Regarding claims 6, Schoolman taken with Catallo et al. in view of Spitzer taken with Fan et al. **does not teach** a flat panel display device which is a liquid crystal display using a liquid crystal material which is antiferroelectric liquid crystal of ferroelectric liquid crystals substantially having no threshold.

Nishi et al. **teaches** an electro-optical device utilizing a liquid crystal having a spontaneous polarization (col. 1, lines 7-26; col. 6, lines 11-67; col. 7, lines 1-36 and Abstract). Nishi et al. further **teaches** a flat panel display device which is a liquid crystal display using a liquid crystal material which is antiferroelectric liquid crystals or ferroelectric liquid crystals substantially having no threshold (col. 11, lines 5-16 and Abstract).

Schoolman taken with Catallo et al. in view of Spitzer taken with Fan teaches a head mounted video display device incorporating means to display images generated from either a system controller or a TV tuner. Nishi et al. teaches a ferroelectric liquid crystal having no sharp threshold value. It would have been obvious to a person of ordinary skill in the art at the time of the invention that the use of a ferroelectric liquid crystals having no substantial threshold would facilitate the liquid crystals having various states that in turn produce various gray levels for image production on the said display devices.

9. Claims 8 and 10, and 14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schoolman taken with Catallo et al. in view of Spitzer taken with Fan et al. as applied to claims 7 and 13 respectively in item 4 hereinabove, and further in view of Funai et al.

Regarding claims 8 and 14, Schoolman taken with Catallo et al. in view of Spitzer taken with Fan et al. **does not teach** channel formation regions of TFTs connected to pixel electrodes of the said flat panel displays of said display device being constituted by a semiconductor thin film formed by a collection of a plurality of bar-shaped or planar bar-shaped crystals formed on an insulting surface.

Funai et al. **teaches** channel formation regions of TFTs connected to pixel electrodes of the said flat panel displays of said display device are constituted by a semiconductor thin film formed by a collection of a plurality of bar-shaped or planar bar-shaped crystals formed on an insulting surface (col. 4, lines 58-64 and col. 5, lines 40-56).

Schoolman taken with Catallo et al. in view of Spitzer taken with Fan teaches a head mounted video display device incorporating means to display images generated from either a system controller or a TV tuner. Funai et al. teaches a method of fabricating semiconductor device wherein a catalyst element is selectively introduced into a predetermined region of an amorphous semiconductor film, thereby selectively crystallizing the predetermined region of the amorphous semiconductor film, wherein crystal growth proceeds in a direction substantially parallel to a surface of the substrate in a predetermined region of the amorphous semiconductor film, thereby forming a lateral crystal growth region. It would have been obvious to a person of ordinary skill in the art at the time of the invention to use semiconductor devices fabricated using the method as taught by Funai et al in order to use semiconductors with faster response characteristics.

Regarding claims 10 and 16, Funai et al. further **teaches** an information processing device wherein the crystal lattices at grain boundaries of a channel formation regions have continuity (col. 12, lines 60-65). Though Funai et al. does not specifically cite 90 % of the crystal lattices at grain boundaries of the channel formation regions having continuity, by the selective crystallization of a predetermined region and with the crystal growth in the direction of the predetermined region forming a defined crystal growth region the resulting crystal lattices would have a high degree of interconnection.

10. Claims 9 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schoolman taken with Catallo et al. in view of Spitzer taken Fan et al. in view of Funai et al. as applied to claims 8 and 14 respectively in item 9 hereinabove and further in view of Oka et al. Relative to claim 9 and 15, Schoolman taken with Catallo et al. in view of Spitzer taken with Fan et al. in view of Funai et al. **does not teach** an information processing device wherein the channel formation regions of TFT's comprise a crystal grain having a <110> plane orientation. Oka et al. **teaches** an information processing device wherein the channel formation regions of TFT's comprise a crystal grain having a <110> plane orientation (col. 4, lines 64-67; col. 5, line 1 and col. 11 lines 34-40).

Schoolman taken with Catallo et al. in view of Spitzer taken with Fan and further in view of Funai et al. teaches a head mounted video display device incorporating means to display images generated from either a system controller or a TV tuner, wherein said display devices are structured with semiconductors fabricated to produce fast response times. Oka teaches a method

of formulating a film wherein crystalline seeds are easily generated by the employment of a relatively high temperature plasma process, polycrystalline silicon with large grains with uniform direction of orientation, such as <110>. It would have been obvious to a person of ordinary skill in the art at the time of the invention to utilize semiconductor devices manufactured as taught by Oka in that it yields semiconductors with improved field effect mobility.

11. Claims 11 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schoolman taken with Catallo et al. in view of Spitzer taken with Fan et al. as applied to claims 7 and 13 respectively in item 4 herein above, and further in view of Intriligator taken with Lewis. Relative to claims 11 and 17, Schoolman taken with Catallo et al. in view of Spitzer taken with Fan et al. **does not teach** flat panel displays comprising a display device on which one screen is written at frequencies in the range from 30 Hz to 180 Hz and on which screen display is carried out with the polarity of the voltage applied to the pixel electrodes inverted for each screen. Intriligator **teaches** a self-synchronizing animation (col. 1, lines 6-9 and col. 2, lines 27-40). Intriligator further **teaches** a display device on which one screen is written at frequencies in the range from 30 Hz to 180 Hz (col. 3, lines 24-37).

Schoolman taken with Catallo et al. in view of Spitzer taken with Fan et al. and further in view of Intriligator **does not teach** flat panel displays comprising a display device on which screen display is carried out with the polarity of the voltage applied to the pixel electrodes inverted for each screen.

Lewis **teaches** an active matrix display with integrated drive circuitry (col. 1, lines 6-8 and 54-65; col. 2, lines 1- 16). Lewis further **teaches** display device on which screen display is carried out with the polarity of the voltage applied to the pixel electrodes inverted for each screen (col. 13, lines 23-34).

Schoolman taken with Catallo et al. in view of Spitzer taken with Fan teaches a head mounted video display device incorporating means to display images generated from either a system controller or a TV tuner. Intriligator teaches a display refresh rate of 60 Hz. It would have been obvious to a person of ordinary skill in the art at the time of the invention to utilize a 60 Hz refresh rate in that it would be consistent with the 60 Hz refresh rate that is in common use in art. Louis teaches said display is carried out with the polarity of the voltage applied to the pixel electrodes inverted for each screen. It would have been further obvious to a person of ordinary skill in the art at the time of the invention to use the polarity inversion method in order to reduce system noise and minimize EMI.

12. Claims 12 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schoolman taken with Catallo et al. in view of Spitzer taken with Fan et al. as applied to claims 7 and 13 respectively in item 4 hereinabove, and further in view of Nishi et al.

Regarding claims 12 and 18, Schoolman taken with Catallo et al. in view of Spitzer taken with Fan et al. **does not teach** a flat panel display device which is a liquid crystal display using a liquid crystal material which is antiferroelectric liquid crystal of ferroelectric liquid crystals substantially having no threshold.

Nishi et al. **teaches** an electro-optical device utilizing a liquid crystal having a spontaneous polarization (col. 1, lines 7-26; col. 6, lines 11-67; col. 7, lines 1-36 and Abstract). Nishi et al. further teaches a flat panel display device which is a liquid crystal display using a liquid crystal material which is antiferroelectric liquid crystals or ferroelectric liquid crystals substantially having no threshold (col. 11, lines 5-16 and Abstract).

Schoolman taken with Catallo et al. in view of Spitzer taken with Fan teaches a head mounted video display device incorporating means to display images generated from either a system controller or a TV tuner. Nishi et al. teaches a ferroelectric liquid crystal having no sharp threshold value. It would have been obvious to a person of ordinary skill in the art at the time of the invention that the use of a ferroelectric liquid crystals having no substantial threshold would facilitate the liquid crystals having various states that in turn produce various gray levels for image production on the said display devices.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U. S. Patent No.	6,072,445	Spitzer et al.
U. S. Patent No.	6,043,800	Spitzer et al.
U. S. Patent No.	6,011,653	Karasawa
U. S. Patent No.	5,971,538	Heffner

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL.** See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Responses

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Vincent E. Kovalick** whose telephone number is **(703) 306-3020**. The examiner can normally be reached Monday-Thursday from 9:00 a.m. to 4:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Bipin Shalwala**, can be reached at **(703) 305-4938.**

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Inquires

16. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is **(703) 306-0377**.

Vincent E. Kovalick

BIPIN SHALWALA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600